

CLAIMS

1. A wiper control method for driving a motor to rotate forwardly and reversely so as to reciprocate a wiper arm for a wiping operation and controlling the operation of the wiper arm according to an absolute position signal output when the wiper arm is located at a predetermined position and a relative position signal output as a function of the rotation of the motor, characterized in that

the wiper arm is driven for a wiping operation according to the output condition of the absolute position signal and that of the relative position signal; and

the sense of rotation of the motor is reversed according to the absolute position signal when the relative position signal becomes abnormal.

2. The method according to claim 1, characterized in that an absolute position signal is output at a first reference position and at a second reference position arranged respectively near the upper turning point and near the lower turning point of the wiper arm and, when the relative position signal becomes abnormal, the sense of rotation of the motor is reversed according to the absolute position signal output at the first reference position and the absolute position signal output at the second reference position.

3. The method according to claim 1 or 2, characterized in that

the sense of rotation is reversed when a predetermined time period has elapsed since the last acquisition of an absolute position signal.

4. The method according to claim 1 or 2, characterized

in that

the sense of rotation is reversed when an absolute position signal is acquired.

5 5. A wiper control method for driving a motor to rotate
forwardly and reversely so as to reciprocate a wiper arm between
an upper turning point and a lower turning point for a wiping
operation and controlling the operation of the wiper arm according
to an absolute position signal output when the wiper arm is located
at a predetermined position and a relative position signal output
10 as a function of the rotation of the motor, characterized in that
the wiper arm has restriction means for mechanically
restricting its operation at operation limiting positions arranged
respectively beyond the upper turning point and beyond the lower
turning point;

15 the wiper arm is driven for a wiping operation according to
the output condition of the absolute position signal and that of
the relative position signal; and

the sense of rotation of the motor is reversed when the
relative position signal becomes abnormal and the wiper arm is
20 restricted by the restriction means.

6. The method according to claim 5, characterized in that
the sense of rotation of the motor is reversed when the wiper
arm gets to one of the operation limiting positions and the motor
falls into a locked condition.

25 7. The method according to claim 6, characterized in that
the motor is judged to be in a locked condition when the flow
rate of the electric current being supplied to the motor exceeds
a predetermined level.

8. A wiper control method for driving a motor to rotate

forwardly and reversely so as to reciprocate a wiper arm for a wiping operation and controlling the operation of the wiper arm according to an absolute position signal output when the wiper arm is located at a predetermined position and a relative position signal output
5 as a function of the rotation of the motor, characterized in that

the wiper arm is driven for a wiping operation according to the output condition of the absolute position signal and that of the relative position signal; and

the motor is driven at a constant output and the sense of
10 rotation of the motor is reversed in every predetermined time period when the relative position signal becomes abnormal.

9. A wiper control method for driving a motor to rotate forwardly and reversely so as to reciprocate a wiper arm between an upper turning point and a lower turning point for a wiping
15 operation and controlling the operation of the wiper arm according to an absolute position signal output when the wiper arm is located at a predetermined position and a relative position signal output as a function of the rotation of the motor, characterized in that

the wiper arm is driven for a wiping operation according to
20 the output condition of the absolute position signal and that of the relative position signal;

the sense of rotation of the motor is reversed according to the absolute position signal when the relative position signal becomes abnormal; and

25 operation limiting positions are arranged respectively beyond the upper turning point and beyond the lower turning point so as to mechanically restrict the operation of the wiper arm and the sense of rotation of the motor is reversed when the absolute position signal becomes abnormal in addition to the relative

position signal and the wiper arm gets to one of the operation limiting positions.

10. The method according to claim 9, characterized in that, if it is not possible to detect that the wiper arm has reached
5 one of the operation limiting positions, the motor is driven at a constant output and the sense of rotation of the motor is reversed in every predetermined time period.